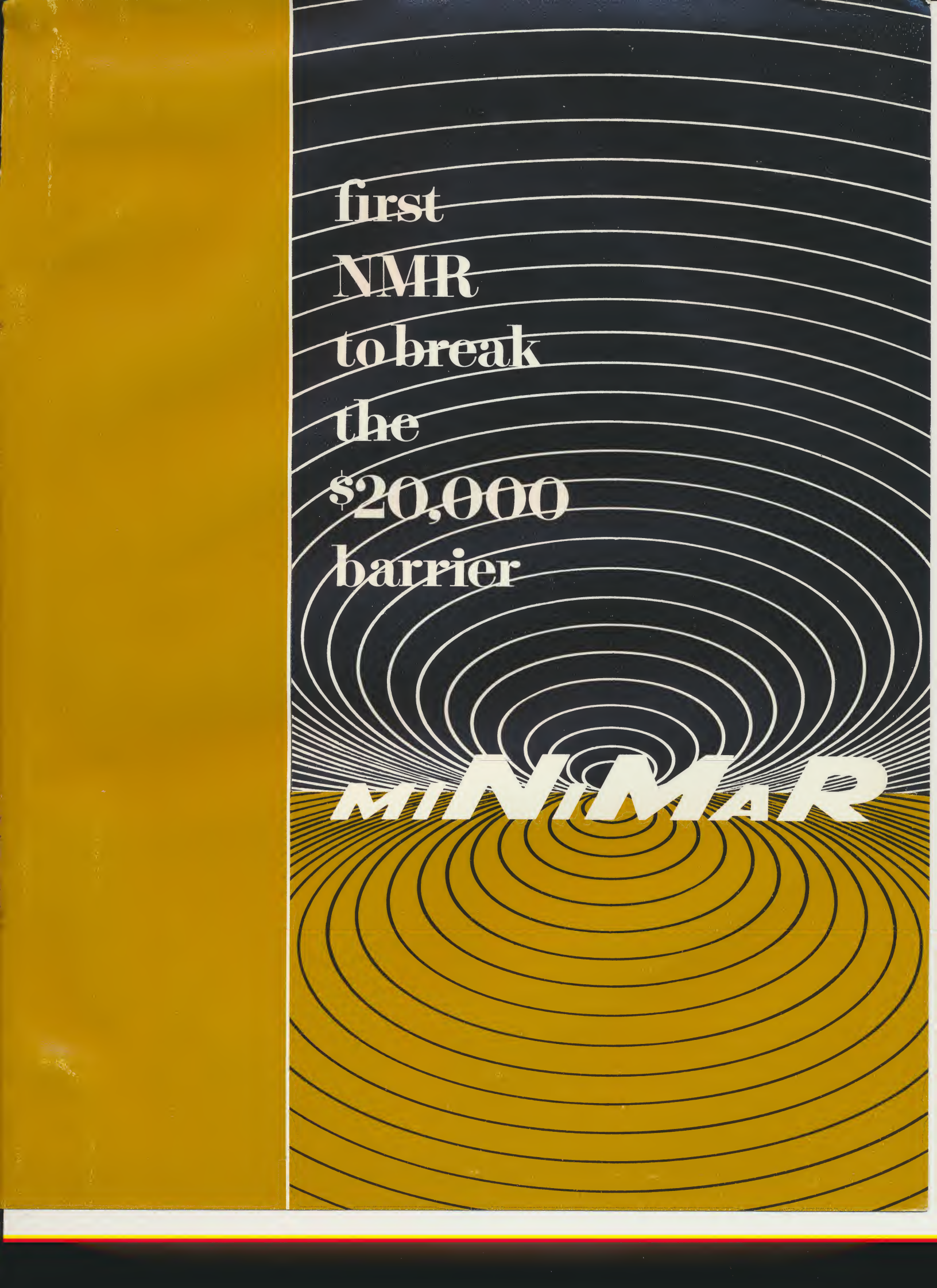
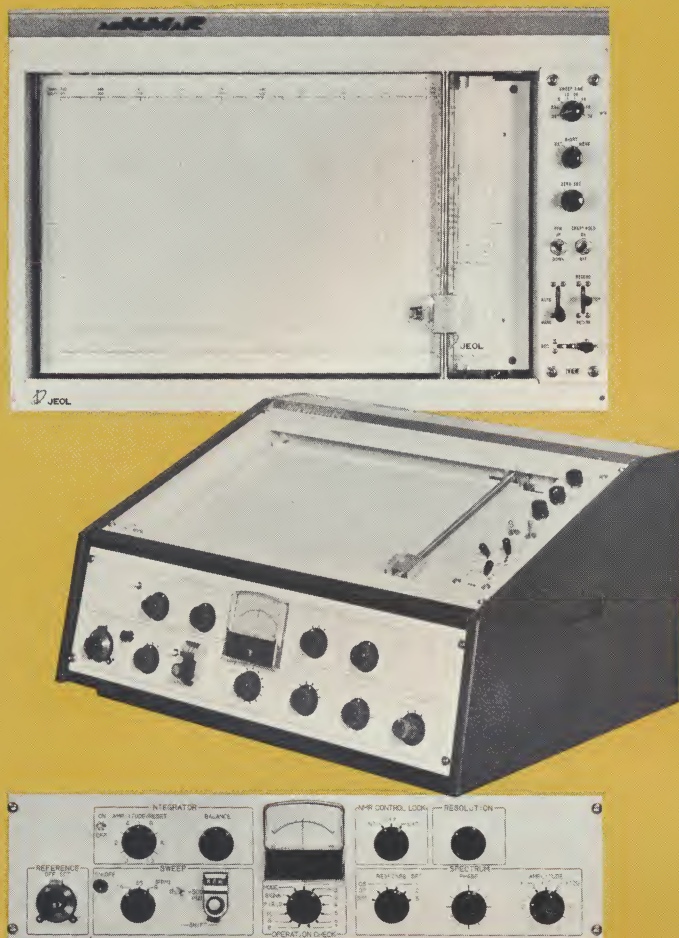




first
NMR
to break
the
\$20,000
barrier

MINIMAR

The spectrometer is only 24"W x 20"D x 12"H. It is truly table-top size and easily moved. However, with all its small size, it has a full-size flat-bed recorder. The control panel is simple to operate — all controls are logically placed for sequential operation and contained in one 6"x 23" panel.



Pole gap is easily accessible. New sample probe incorporates unique field-lock design. Upon insertion of sample into probe, field is instantaneously locked and held for long duration, without any manual control required.



miNiMaR...

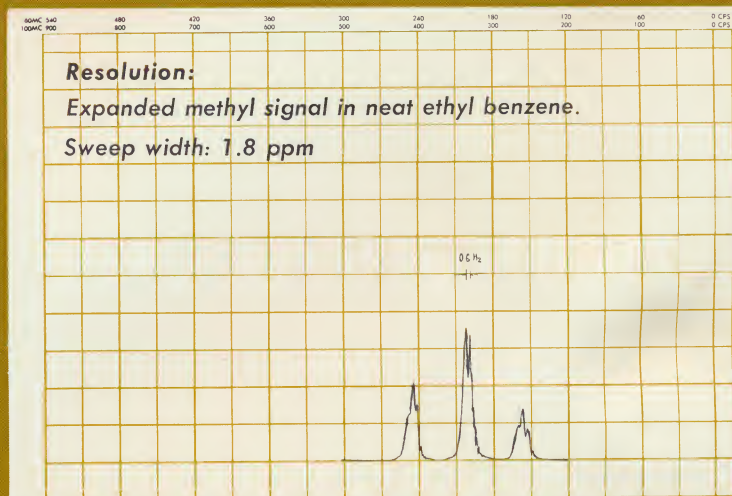
all-new, general-purpose, 60MHz Nuclear

- High resolution — high sensitivity
- Minimal size — light weight
table-top spectrometer
easily movable magnet system
- High stability
new internal lock gives automatic, instantaneous, long-duration NMR control
- All solid state circuitry
- Full-size, flat-bed recorder
- Easy expansion and offset of spectra
- Frequency sweep spin decoupling
- Low impedance magnet
- Easily accessible pole gap
- Simple layout of control panel
provides efficient, easy operation

Many of the unique design features of the pace-setting Jeolco C-60H NMR will be found in miNiMaR — Jeolco's answer to the demand for a low-cost yet high-performance nuclear magnetic resonance instrument for routine organic structural analysis.

First to break the \$20,000 price barrier, miNiMaR now makes possible NMR spectroscopy for the low-budget, educational, industrial and institutional laboratories.

miNiMaR is a small, efficient, compact instrument, simply designed for easy operation with minimum environmental



Proton Magnetic Resonance spectrometer for routine proton analysis of organic structure

...by **jeolco**



requirements — making possible routine performance by persons of less technological orientation and education than required with present NMR equipment.

APPLICATIONS

EDUCATION

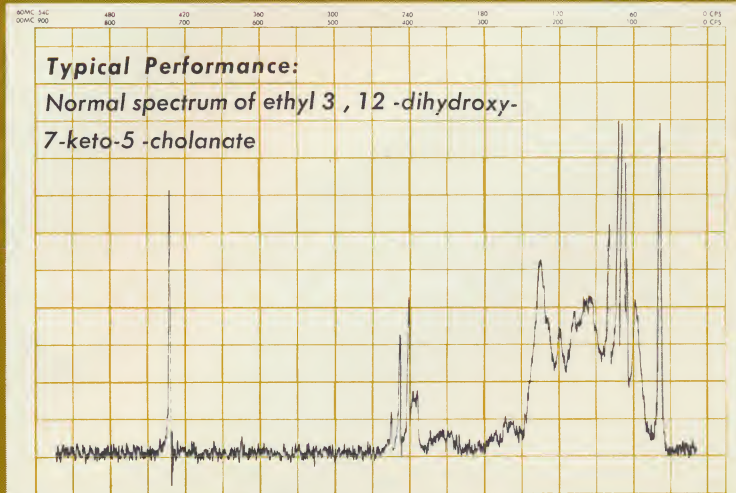
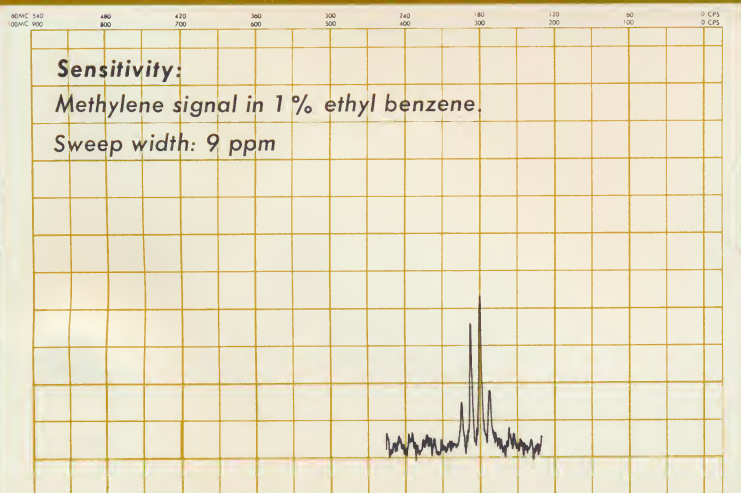
- Graduate School Chemistry Laboratories
an extra instrument for routine research as well as teaching
- Undergraduate College Chemistry Laboratories
for teaching and routine research
- Technical Preparatory Schools and
- High-level High School Science Departments
for teaching

INDUSTRY

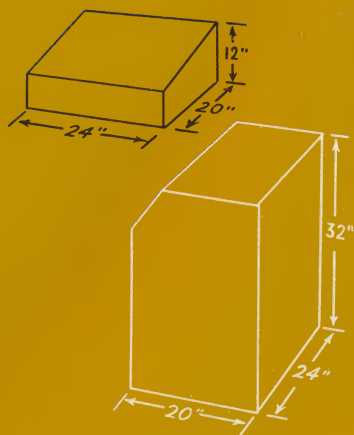
- Small Research Laboratories
- Small-company Laboratories
for routine analytical work
- Larger Company Laboratories
for absorption of heavy overloads of larger, more expensive, non-routine-type NMR equipment for in-plant monitoring for quality control

INSTITUTIONS

- Small Hospitals
for routine research and testing
- Larger Hospitals
for overloads of larger NMR
for speedy analytical investigation



INSTALLATION



No air-conditioning is required.

Cooling water

(Tap water)

Flow rate: Approx. 3 liters per min.

Electric power required:

A.C. 100 v, single phase, 1 KVA

Dimensions and weight:

	Width	Height	Depth	Weight
Spectrometer console	24 in.	12 in.	20 in.	88 lbs.
Magnet system	24 in.	32 in.	20 in.	484 lbs.

SPECIFICATIONS

Applicable nucleus:

Hydrogen nucleus

Standard frequency:

60 MHz

Standard magnetic field:

14,092 gauss

Resolution:

Better than 1×10^{-8} (0.6 Hz)

Sensitivity:

Sufficient to observe the largest peak of the CH_2 quartet in 1% ethyl benzene with $S/N \geq 12$

Sample temperatures:

Fixed at about 35°C

Sweep method:

Frequency sweep

Integrator:

Built-in

Recorder:

Flat-bed type

Recording chart:

Precalibrated standard chart, size: 44.5 cm x 28 cm

Sweep:

Synchronized with the recorder drive

Sweep width:

1.8, 4.5, and 9 ppm

Sweep time:

1.25, 2.5, 5, 10, 20, 40, 60, and 120 min.

Sweep offset:

$-500 \sim +100$ Hz (Equipped with Vernier dial)

Electromagnet:

Low-impedance type



JEOLCO INC.

APPLICATIONS CENTERS — MEDFORD, MASS., BURLINGAME, CALIF., AND NUTLEY, N. J.

BRANCH OFFICES — ATLANTA, CHICAGO, INGLEWOOD, CALIF., MONTREAL